

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the U.S. Patent and Trademark Office upon request and payment of the necessary fee.

[0013] To further clarify the above and other advantages and features of the present invention, a more particular description of the invention will be rendered by reference to specific embodiments thereof which are illustrated in the appended drawings. It is appreciated that these drawings depict only typical embodiments of the invention and are therefore not to be considered limiting of its scope. The invention will be described and explained with additional specificity and detail through the use of the accompanying drawings in which:

[0014] FIG. 1 is a perspective view of a medicinal fluid delivery system illustrating a medicinal fluid delivery device and medicinal fluid container having non-textual indicium;

[0015] FIG. 2 is a perspective view of a medicinal fluid delivery system having a plurality of color coded medicinal fluid delivery devices and medicinal fluid containers;

[0016] FIG. 3 is a perspective view of a medicinal fluid delivery system illustrating loading of a medicinal fluid into a medicinal fluid delivery device from a corresponding medicinal fluid container;

[0017] FIG. 4 is a perspective view of a medicinal fluid delivery system having a manifold system according to an alternative embodiment of the present invention;

[0018] FIG. 5A is a perspective view of a medicinal fluid delivery system having an indicator mechanism according to an alternative embodiment of the present invention; and

[0019] FIG. 5B is a perspective view of a medicinal fluid delivery system having non-textual indicia on an attachment member of the medicinal fluid delivery device.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0020] The present invention is directed to a medicinal fluid delivery system having color coding or other non-textual indicia that serve to associate a medicinal fluid delivery device with the corresponding medicinal fluid. According to one exemplary embodiment, the medical fluid delivery system includes color coded components or other non-textual indicia that serve to associate a medicinal fluid delivery device with a medicinal fluid container. A color coded component or other non-textual indicium is integrated in the medicinal fluid delivery device, and a corresponding indicium is integrated in the medicinal fluid container. The non-textual indicia associate the medicinal fluid delivery device with the medicinal fluid container, and hence the medicinal fluid contained therein. The non-textual indicia help to reduce potential error associated with the delivery of medicinal fluids caused by reloading the medicinal fluid delivery device with the wrong medicinal fluid.

[0021] The association between a medicinal fluid delivery device and a medicinal fluid container containing a particular medicinal fluid can be helpful in medical environments where a number of different medicinal fluids are adminis-

tered to a patient. The non-textual indicia helps to reduce the error associated with the delivery of medicinal fluids by allowing the practitioner to quickly and effectively associate a medicinal fluid delivery device with a medicinal fluid container and the medicinal fluid contained therein. In one exemplary embodiment, the medicinal fluid delivery system comprises a medicinal fluid delivery device having a color coded component. Additionally, the medicinal fluid delivery system includes a medicinal fluid container having a color coded component which is associated with the color coded component of the medicinal fluid delivery device. The color coded medicinal fluid delivery device and the medicinal fluid container allow the practitioner to readily identify the medicinal fluid delivery device that is to be utilized with the medicinal fluid container.

[0022] FIG. 1 illustrates a medicinal fluid delivery system 10 according to one embodiment of the present invention. In the illustrated embodiment, medicinal fluid delivery system 10 comprises a medicinal fluid delivery device 12 and an associated medicinal fluid container 14. In the illustrated embodiment, medicinal fluid delivery device 12 comprises a syringe that is configured to facilitate delivery of medicinal fluid 20 to a patient. Medicinal fluid container 14 is configured to receive and hold medicinal fluid 20 therein and to allow removal of medicinal fluid 20 utilizing medicinal fluid delivery device 12. Both, medicinal fluid delivery device 12 includes non-textual indicia 16 and medicinal fluid container 14 includes non-textual indicia, 18. Non-textual indicia 16, 18 indicate that medicinal fluid 20 contained in medicinal fluid container 14 is to be utilized with medicinal fluid delivery device 12. In the illustrated embodiment, non-textual indicia 16, 18 comprise the color of one or more components of medicinal fluid delivery device 12 and medicinal fluid container 14.

[0023] In the illustrated embodiment, medicinal fluid delivery device 12 comprises a plunger rod 22, a plunger 24, and an elongate hollow cylindrical barrel 26. Plunger rod 22 is configured to be advanced and retracted by a user to facilitate delivery of medicinal fluid 20 to a patient. Plunger 24 is coupled to one end of plunger rod 22. Plunger 24 is received within elongate hollow cylindrical barrel 26. Plunger 24 sealingly engages an inner surface of elongate hollow cylindrical barrel 26. In the illustrated embodiment, plunger 24 comprises a resilient material, such as silicone, thermoplastic rubber, other polymers or non-polymer materials.

[0024] Plunger 24 is configured to be advanced within elongate hollow cylindrical barrel 26 by plunger rod 22. Plunger 24 is configured to sealingly engage the inner surface of barrel 26. Elongate hollow cylindrical barrel 26 comprises a uniform cylindrical tube configured to receive medicinal fluid 20 therein. Elongate hollow cylindrical barrel 26 also includes volume indication marks 28. Elongate hollow cylindrical barrel 26 comprises a resilient, semi rigid, or rigid material, such as acrylic, HDPE, or other polymer or nonpolymer material. In one embodiment, barrel 26 has sufficient resilience to withstand deflection under normal use circumstances. In one embodiment, elongate hollow cylindrical barrel 26 is transparent, semitransparent, or translucent to facilitate proper loading and injection of the medicinal fluid utilized with medicinal fluid delivery device 12.